

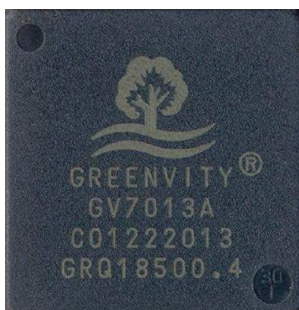
GV7013 Hybrii®-Mini for HomePlug Green PHY Applications

Best-in-class single chip solution of HomePlug Green PHY suitable for cost sensitive smart LED lighting and Home Automation

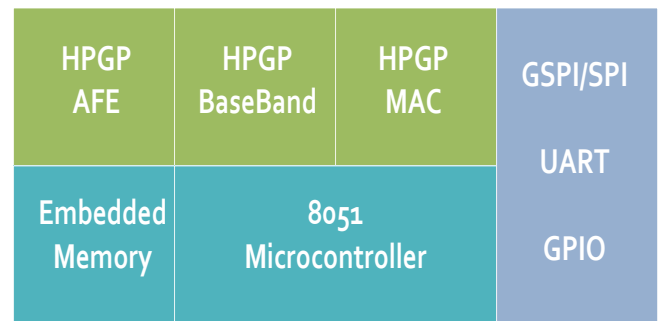
Greenvity® offers the Hybrii-Mini™, GV7013, a highly integrated System-on-Chip (SoC) that supports HomePlug Green PHY (HPGP) Powerline Communication with various system interfaces, including SPI and GSPI for LED lighting control. GV7013 integrates AFE, Baseband, MAC, and high performance 8-bit micro controller with embedded memories. Hybrii-Mini was designed for cost sensitive HPGP applications.

GV7013 Specification

Parameter	Specification
Operation Voltage	1.2/1.8/2.5/3.3V
Spectrum	2M~28MHz
Receiver gain	-18dB to +48dB
Modulation	OFDM
Data Rate	Max. 10Mbps
MCU	8051 MCU
Security	AES-128 En/Decryption
Memory	256KB RAM for Code 48KB RAM for Data
Interface (Host & Peripheral)	GSPI (for LED Lighting) / SPI Serial Flash Interface (up to 1MB)
GPIO	4 (GSPI) / 3 (SPI)
Package	11 x 11 mm, 100-QFN
Operation Temp.	-40°C to +85°C



GV7013 Block Diagram



Target Applications

- Intelligent and Controlled LED Lighting
- Plug-in Electric Vehicle / EV Chargers
- Smart Meter
- Smart Appliances
- Smart Home Network (Home Gateway, Routers and STB)
- Smart Energy Management for Home, Buildings and Multi-Dwelling Units.
- Solar DC-AC Inverter and Micro-Inverters

For more information on the GV7013 or other solutions from Greenvity Communications, please contact Greenvity:

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